Pennsylvania Department of Environmental Protection

Northeast Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0276332**
Facility Type	**Storm Water**	APS ID	**1137731**
Major / Minor	**Minor**	Authorization ID	**1527896**

NPDES PERMIT FACT SHEET INDIVIDUAL INDUSTRIAL WASTE (IW) AND IW STORMWATER

Applicant and Facility Information

Applicant Name	**PA Perlite Corp**	Facility Name	**PA Perlite**
Applicant Address	1428 Mauch Chunk Road	Facility Address	1428 Mauch Chunk Road
	Bethlehem, PA 18018-2338		Bethlehem, PA 18018-2338
Applicant Contact	Jose Abud	Facility Contact	Jose Abud
Applicant Phone	(610) 868-0992	Facility Phone	(610) 868-0992
Client ID	79616	Site ID	465514
SIC Code	3295	Municipality	Bethlehem City
SIC Description	Ground or Treated Mineral and Earth Manufacturing	County	Northampton
Date Application Received	May 21, 2025	EPA Waived?	Yes
Date Application Accepted	May 21, 2025	If No, Reason	

Purpose of Application: Individual Stormwater assoc. with Industrial Activity NPDES Permit Renewal

Summary of Review

The permittee is applying for renewal of an individual NPDES permit to discharge stormwater associated with industrial activity to Monocacy Creek (Stream Code 8834), a designated High-Quality Cold-Water Fishes and Migratory Fishes (HQ-CWF, MF) designated receiving stream in state water plan basin 02-C (Lower Lehigh River). As per the Department's current existing use list, the receiving stream does not have a more protective existing use than its designated use. Monocacy Creek is currently impaired for recreational use due to pathogens from an unknown source. Monocacy Creek is a tributary to the Lehigh River, a major tributary in the Delaware River Basin. The permittee's stormwater discharge is not expected to contribute to the recreational impairment of Monocacy Creek.

PA Perlite Corp is a perlite manufacturer falling under SIC code 3295 (Ground or Treated Mineral and Earth Manufacturing). This SIC code is covered by the Department of Environmental Protection (DEP) PAG-03 general permit appendix N (glass, clay, cement, concrete, and gypsum products). The discharge from the site consists purely of stormwater runoff, and outfalls are cleaned and visually inspected by employees, removing any debris and making sure no contaminants or pollutants enter the Monocacy Creek. All industrial material is stored and packaged for shipment or is warehoused and stored away from all outfalls. The permittee does have a PPC Plan outlining spill prevention and response along with good housekeeping strategies.

The previous permit included hard limits for TSS and pH, which was standard procedure for stormwater permits at the time of issuance. The Department's guidance has changed since then to apply benchmark values instead of hard limits on stormwater permits. As per the Department guidance, hard limits on this permit have been adjusted to become reporting requirements with benchmark values.

Appendix N of the PAG-03 general permit states the permittee must monitor and report analytical results for the following pollutants: Total Nitrogen (TN), Total Phosphorus (TP), pH, Total Suspended Solids (TSS), Total Aluminum, and Total Iron.

Approve	Deny	Signatures	Date
X		Luca Jordache Luca Jordache / Environmental Engineer Trainee	July 2, 2025
X		Edward Dudick, P.E. / Environmental Engineering Manager	July 2, 2025

Summary of Review

Benchmark values are not effluent limitations, and exceedances do not constitute permit violations. However, if the permittee's sampling demonstrates exceedances of benchmark values for two or more consecutive monitoring periods, the permittee shall take action in accordance with Part C III.G of the included permit being issued.

The TSS and pH limit from the previous permit has been changed to accommodate the efforts of the Department moving towards benchmark-based permit limits over hard limits. The benchmark values are 100 mg/L and 9.0 S.U. for TSS and pH respectively, matching the hard limits of the previous permit. Due to pH only having an upper benchmark of 9.0, the lower limit of 6.0 previously imposed has been changed to a reporting requirement. Total Nitrogen will now need to be calculated and reported every 6 months as required in appendix N. Total Phosphorus must now have a grab sample reported every 6 months as required in appendix N. These pollutants do not have a benchmark value associated with them. Total Iron and Total Aluminum reporting requirements are unchanged from the previous permit.

There are currently 2 unresolved violations open for this permittee:

- Failure to submit monitoring reports or properly complete monitoring reports
- Violation of effluent limits in Part A of permit.

These violations do not warrant withholding permit issuance to the permittee.

The following documents were used as aid in the writing of this permit:

PAG03_GENERAL_PERMIT_SAMPLE.pdf

Watershed Info PA0276332.pdf

Appendix N.pdf

Public Participation

DEP will publish notice of the receipt of the NPDES permit application and a tentative decision to issue the individual NPDES permit in the *Pennsylvania Bulletin* in accordance with 25 Pa. Code § 92a.82. Upon publication in the *Pennsylvania Bulletin*, DEP will accept written comments from interested persons for a 30-day period (which may be extended for one additional 15-day period at DEP's discretion), which will be considered in making a final decision on the application. Any person may request or petition for a public hearing with respect to the application. A public hearing may be held if DEP determines that there is significant public interest in holding a hearing. If a hearing is held, notice of the hearing will be published in the *Pennsylvania Bulletin* at least 30 days prior to the hearing and in at least one newspaper of general circulation within the geographical area of the discharge.

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	0
Latitude	40º 37' 59.13"	Longitude	-75º 23' 14.32"
Quad Name		Quad Code	
Wastewater Description:	Stormwater		
Receiving Waters	Monocacy Creek (HQ-CWF, MF)	Stream Code	8834
NHD Com ID	132812896	RMI	1.47 mi
Drainage Area	43.9 mi^2	Yield (cfs/mi^2)	0.305
Q_{7-10} Flow (cfs)	13.38	Q_{7-10} Basis	USGS Station 01452500 Gage at Monocacy Creek at Bethlehem, PA
Elevation (ft)	234	Slope (ft/ft)	0.03
Watershed No.	2-C	Chapter 93 Class.	HQ-CWF, MF
Existing Use	-	Existing Use Qualifier	-
Exceptions to Use	-	Exceptions to Criteria	-
Assessment Status	Impaired for Recreational Use		
Cause(s) of Impairment	Pathogens		
Source(s) of Impairment	Unknown		
TMDL Status	-	Name	-

Background/Ambient Data		Data Source
pH (SU)	-	-
Temperature (°F)	-	-
Hardness (mg/L)	-	-
Other:	-	-

Nearest Downstream Public Water Supply Intake	LOWER SAUCON TWP AUTH NORTHAMPTON CNTY		
PWS Waters	Lehigh River	Flow at Intake (cfs)	289
PWS RMI	4.04 mi	Distance from Outfall (mi)	2.885

Compliance History

DMR Data for Outfall 001 (from June 1, 2024 to May 31, 2025)

Parameter	MAY-25	APR-25	MAR-25	FEB-25	JAN-25	DEC-24	NOV-24	OCT-24	SEP-24	AUG-24	JUL-24	JUN-24
pH (S.U.) Instantaneous Minimum						7.7						8.19
pH (S.U.) Instantaneous Maximum						7.7						8.19
TSS (mg/L) Instantaneous Maximum						< 21.0						17.4
Total Aluminum (mg/L) Daily Maximum						0.291						0.389
Total Iron (mg/L) Daily Maximum						0.224						< 0.2

DMR Data for Outfall 002 (from June 1, 2024 to May 31, 2025)

Parameter	MAY-25	APR-25	MAR-25	FEB-25	JAN-25	DEC-24	NOV-24	OCT-24	SEP-24	AUG-24	JUL-24	JUN-24
pH (S.U.) Instantaneous Minimum						8.34						6.52
pH (S.U.) Instantaneous Maximum						8.34						6.52
TSS (mg/L) Instantaneous Maximum						< 87.3						71.0
Total Aluminum (mg/L) Daily Maximum						1.07						< 0.20
Total Iron (mg/L) Daily Maximum						1.53						< 0.20

DMR Data for Outfall 003 (from June 1, 2024 to May 31, 2025)

Parameter	MAY-25	APR-25	MAR-25	FEB-25	JAN-25	DEC-24	NOV-24	OCT-24	SEP-24	AUG-24	JUL-24	JUN-24
pH (S.U.) Instantaneous Minimum						8.16						7.38
pH (S.U.) Instantaneous Maximum						8.16						7.38
TSS (mg/L) Instantaneous Maximum						34.0						17.0
Total Aluminum (mg/L) Daily Maximum						0.302						< 0.20
Total Iron (mg/L) Daily Maximum						0.636						< 0.20

Tools and References Used to Develop Permit	
☐	Water Quality Toxics Management Strategy, 361-0100-003, 4/06.
☐	Technical Guidance for the Development and Specification of Effluent Limitations, 386-0400-001, 10/97.
☐	Policy for Permitting Surface Water Diversions, 386-2000-019, 3/98.
☐	Policy for Conducting Technical Reviews of Minor NPDES Renewal Applications, 386-2000-018, 11/96.
☐	Technology-Based Control Requirements for Water Treatment Plant Wastes, 386-2183-001, 10/97.
☐	Technical Guidance for Development of NPDES Permit Requirements Steam Electric Industry, 386-2183-002, 12/97.
☐	Pennsylvania CSO Policy, 386-2000-002, 9/08.
☐	Water Quality Antidegradation Implementation Guidance, 391-0300-002, 11/03.
☐	Implementation Guidance Evaluation & Process Thermal Discharge (316(a)) Federal Water Pollution Act, 386-2000-008, 4/97.
☐	Determining Water Quality-Based Effluent Limits, 386-2000-004, 12/97.
☐	Implementation Guidance Design Conditions, 386-2000-007, 9/97.
☐	Technical Reference Guide (TRG) WQM 7.0 for Windows, Wasteload Allocation Program for Dissolved Oxygen and Ammonia Nitrogen, Version 1.0, 386-2000-016, 6/2004.
☐	Interim Method for the Sampling and Analysis of Osmotic Pressure on Streams, Brines, and Industrial Discharges, 386-2000-012, 10/1997.
☐	Implementation Guidance for Section 95.6 Management of Point Source Phosphorus Discharges to Lakes, Ponds, and Impoundments, 386-2000-009, 3/99.
☐	Technical Reference Guide (TRG) PENTOXSD for Windows, PA Single Discharge Wasteload Allocation Program for Toxics, Version 2.0, 386-2000-015, 5/2004.
☐	Implementation Guidance for Section 93.7 Ammonia Criteria, 386-2000-022, 11/97.
☐	Policy and Procedure for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers, 386-2000-013, 4/2008.
☐	Implementation Guidance Total Residual Chlorine (TRC) Regulation, 386-2000-011, 11/1994.
☐	Implementation Guidance for Temperature Criteria, 386-2000-001, 4/09.
☐	Implementation Guidance for Section 95.9 Phosphorus Discharges to Free Flowing Streams, 386-2000-021, 10/97.
☐	Implementation Guidance for Application of Section 93.5(e) for Potable Water Supply Protection Total Dissolved Solids, Nitrite-Nitrate, Non-Priority Pollutant Phenolics and Fluorides, 386-2000-020, 10/97.
☐	Field Data Collection and Evaluation Protocol for Determining Stream and Point Source Discharge Design Hardness, 386-2000-005, 3/99.
☐	Implementation Guidance for the Determination and Use of Background/Ambient Water Quality in the Determination of Wasteload Allocations and NPDES Effluent Limitations for Toxic Substances, 386-2000-010, 3/1999.
☐	Design Stream Flows, 386-2000-003, 9/98.
☐	Field Data Collection and Evaluation Protocol for Deriving Daily and Hourly Discharge Coefficients of Variation (CV) and Other Discharge Characteristics, 386-2000-006, 10/98.
☐	Evaluations of Phosphorus Discharges to Lakes, Ponds and Impoundments, 386-3200-001, 6/97.
☐	Pennsylvania's Chesapeake Bay Tributary Strategy Implementation Plan for NPDES Permitting, 4/07.
☐	SOP: Individual NPDES SOP - Industrial Was; Individual Industrial SOP - Effl
☐	Other: